

LIST OF ART CITED BY APPLICANT

(PTO-1449)

ATTY. DOCKET NO. **UIOWA-0052** APPLN. SERIAL NO. **10/687,918**

APPLICANT(S)
Johna LEDDY and Chaminda HETTIGE

**FILING DATE
10/20/2003**

U.S. PATENT DOCUMENTS

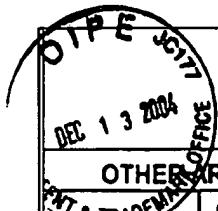
U.S. PATENT APPLICATION PUBLICATIONS

	*PATENT APPLN. PUB. NO.	*PUB. DATE	*APPLICANT	CLASS	SUBCLASS

U.S. PATENT APPLICATIONS

	*APPLN. NO.	*FILING DATE	*INVENTOR	CLASS	SUBCLASS	

FOREIGN PATENT DOCUMENTS



LIST OF PRIOR ART CITED BY APPLICANT

(PTO-1449)

OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)

J. Leddy, et al., "Magnetically Modified Fuel Cell", 39th Power Source Proceedings, 2000, pages 144-147.

(duplicate)

EXAMINER

DATE CONSIDERED

3/22/05

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LIST OF PRIOR ART CITED BY APPLICANT (PTO-1449) <small>APR 21 2004 U.S. PATENT & TRADEMARK OFFICE</small>				ATTY. DOCKET NO. UIOWA-0052	APPLN. SERIAL NO. 10/687,918	
				APPLICANT(S) John LEDDY and Chaminda HETTIGE		
				CUSTOMER NO. 34810		
				FILING DATE October 20, 2003	GROUP 1754	
U.S. PATENT DOCUMENTS						
EXAMINER'S INITIALS	*PATENT NO.	*ISSUE DATE	*INVENTOR NAME	CLASS	SUBCLASS	FILING DATE
U.S. PATENT APPLICATION PUBLICATIONS						
*PATENT APPLN. NO.	*PUB. DATE	*APPLICANT	CLASS	SUBCLASS		
U.S. PATENT APPLICATIONS						
*APPLN. NO.	*FILING DATE	*INVENTOR	CLASS	SUBCLASS		
FOREIGN PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation
<i>M</i>	JP10106577	04/24/98	Japan(Full Japanese Text)			Yes No
OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)						
EXAMINER			DATE CONSIDERED		3/22/05	

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EXAMINER'S INITIALS	*PATENT NO.	*ISSUE DATE	*INVENTOR NAME	CLASS	SUBCLASS	FILING DATE
w	5,422,246	06/06/95	KOOPAL et al.	435	14	06/14/93
w	6,615,078 B1	09/02/03	BURSON et al.	604	20	04/21/00
w	5,208,154	05/04/93	WEAVER et al.	435	176	04/08/91
w	4,613,541	09/23/86	ISODA	428	212	12/31/85
w	4,711,245	12/08/87	HIGGINS et al.	128	635	05/07/84
w	5,391,272	02/21/95	O'DALY et al.	204	153.12	03/08/94
w	6,071,392	06/06/00	YAMAMOTO et al.	204	403	06/03/98
w	5,298,144	03/29/94	SPOKANE	204	403	09/15/92
w	5,011,786	04/30/91	ISODA et al.	437	51	06/23/89
U.S. PATENT APPLICATION PUBLICATIONS						
	*PATENT APPLN. PUB. NO.	*PUB. DATE	*APPLICANT	CLASS	SUBCLASS	
w	2003/0104119A1	06/05/03	WILSON et al.	427	2.1	11/21/01
w	2003/0175803A1	09/18/03	TSIONSKY et al.	435	7.1	09/10/02
U.S. PATENT APPLICATIONS						
	*APPLN. NO.	*FILING DATE	*INVENTOR	CLASS	SUBCLASS	
FOREIGN PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation Yes No
w	WO 02/01228A2	01/03/02	WIPO			
w	WO00/43783	07/27/00	WIPO			
w	JP62215861A2	09/22/87	Japan (Full Japanese Text)			Abst
w	WO02/47246A1	06/13/02	WIPO			
w	JP63010562A2	01/18/88	Japan (Full Japanese Text)			Abst
OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)						
w	C. Hettige et al., "Electron Transfer Rate Enhancement of Myoglobin in Magnetic Fields," 202 nd Meeting of the Electrochemical Society (October 21, 2002) p. 1.					
w	L.A. Zook, "Morphological Modification of Nafion for Improved Electrochemical Flux," Thesis, December 1996, pp. 1-134.					
w	H. Pan et al., "Effect of magnetization treatment on the electrochemical properties of La _{0.9} Sm _{0.1} Ni _{2.0} Co _{3.0} electrode alloy," J. Alloys and Compounds, Vol. 327, 2001, pp. 136-140.					
EXAMINER	J. G.		DATE CONSIDERED		3/22/05	

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n	4,902,555	02/20/90	ISODA et al.	428	195	07/13/87
n	5,205,920	04/27/93	OYAMA et al.	204	403	03/02/90
n	5,272,087	12/21/93	EL MURR et al.	435	291	10/16/90
n	6,503,701 B1	01/07/03	BAUER	435	4	11/21/01
n	6,342,347 B1	01/29/02	BAUER	435	4	10/22/99
n	5,262,305	11/16/93	HELLER et al.	435	28	09/03/91
n	5,710,011	01/20/98	FORROW et al.	435	25	03/06/95
n	4,978,610	12/18/90	FORREST et al.	435	7	07/23/87
n	5,869,200	02/09/99	NUNNALLY	429	10	08/12/97
U.S. PATENT APPLICATION PUBLICATIONS						
	*PATENT APPLN. PUB. NO.	*PUB. DATE	*APPLICANT	CLASS	SUBCLASS	
n	2003/0150739A1	08/14/03	MOROZOV et al.	205	133	03/03/03
n	2003/0124572A1	07/03/03	UMEK et al.	435	6	07/30/02
U.S. PATENT APPLICATIONS						
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FOREIGN PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation
n	WO87/07386	12/03/87	WIPO			Yes No
n	JP2001252553	09/18/01	Japan (Full Japanese Text)			Abst
n	JP2000030743	01/28/00	Japan (Full Japanese Text)			Abst
n	JP11323654	11/26/99	Japan (Full Japanese Text)			Abst
OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)						
n	Johna Leddy et al., "Magnetically Modified Fuel Cells," 39 th Power Source Proceedings, 2000, pp. 144-147.					
x	D.A.J. Rand, "Battery Systems for Electric Vehicles - A State-of-the-Art Review," Journal of Power Sources, 1979, Vol. 4, pp. 101-143.					
n	Robert F. Nelson, "Power requirements for batteries in hybrid electric vehicles," Journal of Power Sources, 2000, Vol. 91, pp. 2-26.					
n	Lester B. Lave et al., "Environmental Implications of Electric Cars," Science, Vol. 268, May 19, 1995, pp. 993-995.					
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w	3,409,471	11/05/68	F.V. STURM et al.			06/18/64
w	3,811,952	05/21/74	SIWERSSON et al.	136	86 A	06/20/73
w	3,853,628	12/10/74	FOX	136	86 D	07/26/73
w	4,037,022	07/19/77	CHERON	429	10	05/06/76
w	4,201,827	05/06/80	HEITKAMP	428	283	11/23/77
w	5,871,625	02/16/99	LEDDY et al.	204	290 R	06/06/96
w	6,322,676 B1	11/27/01	LEDDY et al.	204	296	03/25/98
w	6,303,242 B1	10/16/01	LEDDY et al.	429	10	12/10/99
w	5,817,221	10/06/98	LEDDY et al.	204	290 R	02/05/96
U.S. PATENT APPLICATION PUBLICATIONS						
	*PATENT APPLN. PUB. NO.	*PUB. DATE	*APPLICANT	CLASS	SUBCLASS	
w	2002/0155476A1	10/24/02	POURMAND et al.	435	6	10/19/01
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FOREIGN PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
w	JP2001155746	06/08/01	Japan (Full Japanese Text)			Abst
OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)						
w	Alexander H. Tullo, "Maintaining A Charge," C&EN Northeast News Bureau, July 15, 2002, pp. 25-26.					
w	Nicholas J. Turro et al., "Magnetic Field and Magnetic Isotope Effects in Organic Photochemical Reactions. A Novel Probe of Reaction Mechanisms and a Method for Enrichment of Magnetic Isotopes," Acc. Chem. Res., 1980, Vol. 13, pp. 369-377.					
w	M. Feng et al., "Raman Spectroscopic and Electrochemical Characterization of Myoglobin Thin Film: Implication of the Role of Histidine 64 for Fast Heterogeneous Electron Transfer," J. Am. Chem. Soc., Vol. 123, No. 13, April 4, 2001, pp. 3013-3020.					
w	A.F. Nassar et al., "Catalytic Reduction of Organohalide Pollutants by Myoglobin in a Biomembrane-like Surfactant Film," J. Am. Chem. Soc., Vol. 117, No. 44, November 8, 1995, pp. 10986-10993.					
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<i>n</i>	5,786,040	07/28/98	LEDDY et al.	427	598	04/01/96
<i>n</i>	6,355,166 B1	03/12/02	AMARASINGHE et al.	210	223	10/29/99
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<i>n</i>	J.F. Rusling et al., "Enhanced Electron Transfer for Myoglobin in Surfactant Films on Electrodes," J. Am. Chem. Soc., Vol. 115, No. 25, December 15, 1993, pp. 11891-11897.					
<i>n</i>	D. Mimica et al., "Electroreduction of nitrite by hemin, myoglobin and hemoglobin in surfactant films," J. Electroanalytical Chemistry, Vol. 497, 2001, pp. 106-113.					
<i>n</i>	J. Niu et al., "The direct electrochemistry of cryo-hydrogel immobilized myoglobin at a glassy carbon electrode," Vol. 399, Nos. 1-2, December 19, 1995, pp. 41-46.					
<i>n</i>	J.F. Rusling, "Liquid crystal surfactant films for electrochemical catalysis," Microporous Materials, Vol. 3, 1994, pp. 1-16.					
<i>n</i>	I. Hamachi et al., "Functional Conversion of Myoglobin Bound to Synthetic Bilayer Membranes: From Dioxygen Storage Protein to Redox Enzyme," J. Am. Chem. Soc., Vol. 113, No. 25, December 4, 1991, pp. 9625-9630.					
<i>n</i>	Kanya Yamazaki et al., "Secondary nonaqueous electrolyte batteries containing magnetic additives," JP10106577, April 24, 1998 (Abstract only).					
<i>n</i>	Esther S. Takeuchi "Magnetically compatible electrochemical cell," EP0980105, February 16, 2000 (Abstract only).					
<i>n</i>	J. Maruo et al., "Non-Aqueous Electrolyte Secondary Battery," JP10106581, April 24, 1998 (Abstract only).					
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						Yes	No

OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)

n n n	<p>Jianxin Ma et al., "New method to improve the electrochemical properties of hydrogen storage electrode alloy," SciFinder Scholar, Jinshu Xuebao, 2001, 37(1), pp. 57-60 (Abstract only).</p> <p>V.I. Markarov et al., "Magnetic properties of powders, and their electrochemical activity," SciFinder Scholar, Tr. Novocherkassk. Politekh. Inst., 1970, 208, pp. 100-103 (Abstract only).</p> <p>Masahiro Yamaguchi et al., "Effect of a magnetic field on the emf. of a Ni-MH secondary battery," Tohoku Daigaku Kinzoku Zairyō Kenkyusho Kyojiba Chodendo Zairyō Kenkyū Senta Nenji Hokoku, 1999, 222, 127 (Abstract only).</p>
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1992, 329-333 (Abstract only).
EXAMINER *[Signature]* DATE CONSIDERED 3/22/92